

Urine Collection for Determination of Exposure to Chemical Agents (Terrorism and/or Accidental)

Collect seven to eight hours after exposure

General Principles

Collect urine from patients exposed to, or suspected of being exposed to, certain chemical agents, including heavy metals. Correct identification is essential in each step, from patient registration to final deposition of each component. A numeric or alphanumeric system must be used that links the patient, patient record, and all specimens collected for that patient. As with all specimen collection, care must be taken to avoid mix up of specimens. If the patient is conscious and able to, have the patient collect his/her own urine in a urine cup. If the patient is unconscious or unable to collect his/her own urine, ask a registered or licensed nurse or a physician to either insert a catheter or perform a suprapubic tap for urine collection.

Materials

1. Gloves
2. Urine Collection Cup
3. Catheter Set
4. Suprapubic Aspiration Needle
5. Security/Evidence Tape
6. Chain of Custody Form
7. Local Public Health Submittal Form
8. Specimen Biohazard Bag

Procedure

1. Each patient should be assigned a unique identifier consisting of the zip code of the facility, a 2-letter facility identifier, and the patient medical record number. (Example; for Fresno Community Hospital – 93721FC999999)
2. For each patient, collect 15-30 mL of urine. The absolute minimum is 2mL. Include in the shipment an empty cup from each lot number used. These will be used as blanks in the analytical process.
3. Each specimen must be labeled with at least the following information: specimen identification number, collector's initials, and time and date of collection. Please do not include the patient's name.
4. Make sure the urine is not contaminated with dust or dirt from improper handling.

5. After the urine is collected and the specimen is labeled, seal the urine cup with security tape/evidence tape. Do not wrap the tape around the lid. Rather, place it over the top of the lid, with both ends attached to the cup itself. Place the urine cup in a specimen biohazard bag.
6. Begin a Chain of Custody form. Make sure to include your full name, excluding nicknames, and the date and the time, as well as where you place the specimen to be stored.
7. Store the urine samples at -20° C in a locked freezer. Be sure that the chain of custody and submittal forms are completely filled out and kept with the urine specimens at all times.
8. The urine samples are diagnostic specimens. Package them accordingly.
9. Notify your local public health laboratory that specimens are ready for pick-up and follow the chain of custody procedure.